

this gas reacts with water, forming these acids in equal molecular proportions.

In a graph platted with daily concentrations of total nitrogen (nitric-nitrous) as abscissæ and with rainfall as ordinates, the points are found to arrange themselves into a series of rectangular hyperbolæ. Further, each group of points lying along a particular curve is found to correspond with falls of rain occurring during one particular type of weather. From this it follows that for a particular type of weather (1) the concentration of oxidized nitrogen varies inversely as the rainfall; (2) the product of the concentration and the rainfall is constant; (3) the total weight per unit area of oxidized nitrogen precipitated with rain falling during 24 hours is constant. In brief, the amount of oxidized nitrogen per acre carried down by rain falling on any day is a function of the type of weather and, within certain limits, is independent of the amount of rainfall. These facts may be explained by assuming that for each type of weather there exists in the air a definite concentration of nitrogen peroxide, and that this soluble gas is completely washed out of the air by the first portions of a shower; any further rain falling through the now purified air not increasing the amount of oxidized nitrogen in the rain water but decreasing, by dilution, the concentration.

Nine well-defined recurring types of [Australian] weather have been investigated. These may be classified into three groups as follows: (1) Antarctic types; (2) tropical types; (3) divided-control types (Antarctic and tropical). Table 1 presents the number of cases of each type investigated together with the oxidized nitrogen constant for each type.

TABLE 1.—The oxidized nitrogen constant in rain accompanying different types of weather at Melbourne, Victoria, 1912–1914.

Weather types.	Number.	Oxidized nitrogen constant.
Antarctic types:		
A-shaped Antarctic depressions—		<i>Lbs. per 1,000 acres.</i>
(a) Rear.....	35	1.5
(b) Crest.....	28	2.5
(c) Front.....	10	4.1
Tropical types:		
Tropical (or monsoonal) depressions—		
(a) Spring and autumn.....	6	16.0
(b) Summer type.....	3	24.0
(c) "Heat-wave" type.....	2	35.0
Divided control types:		
(d) Antarctic depressions with <i>slight</i> tropical influence.....	6	6.1
(e) Antarctic depressions with <i>strong</i> tropical influence.....	4	8.5
(f) Tropical depressions with <i>slight</i> Antarctic influence.....	5	12.0

SERIAL NUMBERS OF WEATHER BUREAU PUBLICATIONS.

By ROBERT SEYBOTH, In Charge of Printing Division.

[Dated: U. S. Weather Bureau, Washington, August, 1915.]

Beginning with January, 1895, a serial number (e. g., W. B. 525) has been given to every Weather Bureau publication that has a full title page or cover.¹ This series includes all folio, quarto, and octavo bulletins, Instrument Division circulars, important miscellaneous publications and extracts from the MONTHLY WEATHER REVIEW, and the successive numbers of the MONTHLY WEATHER REVIEW. As it was found that 59 publications had been issued prior to 1895, counting from the date on which the Weather Bureau was organized by the transfer of the meteorological duties of the Signal Service of the Army to the Department of Agriculture, July 1, 1891, the first

publication of 1895 was given the serial number 60. The 59 numbers above referred to do not include the numerous publications issued by the bureau (Signal Service) prior to its transfer from the War Department to the Department of Agriculture.

Most of the numbers from 60 to 210, inclusive, as well as some later ones, are no longer available for distribution.

The reader is particularly urged to note carefully that the symbol "W. B. No. 545" refers to the *serial number* in the following list; it does *not* mean "Weather Bureau Bulletin No. 545," and should not be referred to as such.

W. B. No.	Title of publication.
60	Monthly Weather Review for January, 1895.
61	Instructions to Observers, and Code for Enciphering Reports at Cotton Region and Sugar and Rice Stations of the Weather Bureau.
62	Monthly Weather Review. Annual Summary for 1894.
63	Studies of Weather Types and Storms. No. 1. Types of Storms in January. Extract from Monthly Weather Review.
64	Monthly Weather Review for February, 1895.
65	Monthly Weather Review for March, 1895.
66	Circular B. Instructions for Use of Maximum and Minimum Thermometers. C. F. Marvin. Revised edition.
67	Circular C. Instructions for Use of the Rain Gauge. C. F. Marvin. Revised edition.
68	Monthly Weather Review for April, 1895.
69	Climate and Health. No. 1.
70	Monthly Weather Review for May, 1895.
71	Climate and Health. No. 2.
72	Monthly Weather Review for June, 1895.
73	Climate and Health. No. 3.
74	Monthly Weather Review for July, 1895.
75	Climate and Health. No. 4.
76	Monthly Weather Review for August, 1895.
77	Bulletin No. 16. The Determination of the Relative Quantities of Aqueous Vapor in the Atmosphere by means of the Absorption Lines of the Spectrum. L. E. Jewell.
78	Climate and Health. No. 5.
79	Monthly Weather Review for September, 1895.
80	Instructions to Wind-Signal (Storm-Warning) Displaymen of the Weather Bureau.
81	Statistics of the State Weather Services. O. L. Fassig. <i>Extract from Monthly Weather Review.</i>
82	Climate and Health. No. 6.
83	Monthly Weather Review for October, 1895.
84	Climate and Health. Vol. 2, No. 1.
85	Departures from Normal Temperatures and Rainfall, with Crop Yields in Nebraska. H. H. C. Dunwoody.
86	Injury from Frost and Methods of Protection. H. E. Williams.
87	Display of Wind Signals on the Great Lakes.
88	Bulletin No. 17. The Work of the Weather Bureau in Connection with the Rivers of the United States. Willis L. Moore.
89	Monthly Weather Review for November, 1895.
90	Bulletin No. 18. Report of the Fourth Annual Meeting of the American Association of State Weather Services, held at Indianapolis, Indiana, October 16 and 17, 1895. James Berry.
91	Monthly Weather Review for December, 1895.
92	Studies of Weather Types and Storms. Part 2. E. B. Garriott and others. <i>Extract from Monthly Weather Review.</i>
93	Climate and Health. Vol. 2, No. 2.
94	Monthly Weather Review. Annual Summary for 1895.
95	Monthly Weather Review for January, 1896.
96	Climate and Health. Vol. 2, No. 3.
97	Bulletin No. 19. Report on the Relative Humidity of Southern New England and other Localities. A. J. Henry.
98	Monthly Weather Review for February, 1896.
99	Monthly Weather Review for March, 1896.
100	Bulletin No. 13. Temperatures Injurious to Food Products in Storage and During Transportation, and Methods of Protection from the Same. H. E. Williams. Reprinted as Farmers' Bulletin No. 125.
101	Monthly Weather Review for April, 1896.
102	St. Louis Tornado. H. C. Frankenfield and A. J. Henry. <i>Extract from Monthly Weather Review.</i>
103	Monthly Weather Review for May, 1896.
104	Responses to the Programme of Questions Proposed for Discussion at the International Meteorological Conference to be held in Paris September, 1896.
105	Monthly Weather Review for June, 1896.
106	Monthly Weather Review for July, 1896.

¹ See MONTHLY WEATHER REVIEW, November, 1902, 80: 528–530.

- | W. B. No. | Title of publication. | W. B. No. | Title of publication. |
|-----------|--|-----------|---|
| 107 | Monthly Weather Review for August, 1896. | 163 | Bulletin No. 22. Climate of Cuba; also, A Note on the Weather of Manila. W. F. R. Phillips. |
| 108 | Monthly Weather Review for September, 1896. | 164 | Monthly Bulletin of the River and Flood Service for May, 1898. <i>Extract from Monthly Weather Review.</i> |
| 109 | Circular G, Instrument Division. Instructions for the Care and Management of Sunshine Recorders. C. F. Marvin. | 165 | Monthly Weather Review for April, 1898. |
| 110 | Kite Experiments at the Weather Bureau. C. F. Marvin. <i>Extract from Monthly Weather Review.</i> | 166 | Circular K, Instrument Division. Instructions for Aerial Observers. C. F. Marvin. |
| 111 | Monthly Weather Review for October, 1896. | 167 | Circular A, Instrument Division. Instructions for Obtaining and Tabulating Records from Recording Instruments. C. F. Marvin. |
| 112 | Daily River Stages. Part V. For the years 1893, 1894, and 1895. | 168 | Investigation of the Cyclonic Circulation and the Translatory Movement of West Indian Hurricanes. Rev. B. Vines. <i>Extract from Bulletin No. 11.</i> |
| 113 | Monthly Weather Review for November, 1896. | 169 | Bulletin of the River and Flood Service for June, 1898. <i>Extract from Monthly Weather Review.</i> |
| 114 | Bulletin No. 20. Storms, Storm Tracks, and Weather Forecasting. F. H. Bigelow. | 170 | Monthly Weather Review for May, 1898. |
| 115 | Monthly Weather Review for December, 1896. | 171 | Moisture Tables. C. F. Marvin. <i>Extract from Monthly Weather Review.</i> |
| 116 | Monthly Weather Review. Annual Summary for 1896. | 172 | Monthly Weather Review for June, 1898. |
| 117 | Monthly Weather Review for January, 1897. | 173 | Monthly Bulletin of the River and Flood Service for July, 1898. <i>Extract from Monthly Weather Review.</i> |
| 118 | Monthly Weather Review for February, 1897. | 174 | Monthly Weather Review for July, 1898. |
| 119 | Instructions to Voluntary Observers, 1897. | 175 | Monthly Bulletin of the River and Flood Service for August, 1898. <i>Extract from Monthly Weather Review.</i> |
| 120 | Monthly Weather Review for March, 1897. | 176 | Monthly Weather Review for August, 1898. |
| 121 | Monthly Weather Review for April, 1897. | 177 | Monthly Bulletin of the River and Flood Service for September, 1898. <i>Extract from Monthly Weather Review.</i> |
| 122 | A Monograph on the Mechanics and Equilibrium of Kites. C. F. Marvin. <i>Extract from Monthly Weather Review.</i> | 178 | Monthly Weather Review for September, 1898. |
| 123 | Monthly Weather Review for May, 1897. | 179 | The Probable State of the Sky Along the Path of Total Eclipse of the Sun, May 28, 1900. <i>Extract from Monthly Weather Review.</i> |
| 124 | The Standard System of Coordinate Axes for Magnetic and Meteorological Observations and Computations. F. H. Bigelow. <i>Extract from Monthly Weather Review.</i> | 180 | Aneroid Barometers. C. F. Marvin. <i>Extract from Monthly Weather Review.</i> |
| 125 | Wind Barometer Tables. <i>Extract from Monthly Weather Review.</i> | 181 | Report of the Chief of the Weather Bureau for 1898. 8vo. |
| 126 | Clothing and Temperature. W. F. R. Phillips. <i>Extract from Monthly Weather Review.</i> | 182 | Monthly Bulletin of the River and Flood Service for October, 1898. <i>Extract from Monthly Weather Review.</i> |
| 127 | Tables for Obtaining the Temperature of the Dewpoint, Relative Humidity, etc. | 183 | Monthly Weather Review for October, 1898. |
| 128 | Monthly Weather Review for June, 1897. | 184 | Instructions for Voluntary Observers. 1899. |
| 129 | Monthly Weather Review for July, 1897. | 185 | Monthly Weather Review for November, 1898. |
| 130 | The Equations of Hydrodynamics in a Form Suitable for Application to the Earth's Atmosphere. J. Cottier. <i>Extract from Monthly Weather Review.</i> | 186 | Bulletin No. 23. Frost. When to Expect it and How to Lessen the Injury Therefrom. W. H. Hammon. |
| 131 | Monthly Weather Review for August, 1897. | 187 | Bulletin No. 24. Proceedings of the Convention of Weather Bureau Officials held at Omaha, Nebr., October 13-14, 1898. James Berry. |
| 132 | Instructions for use of Aneroid Barographs on the Great Lakes. | 188 | Climate and Crop Report. Season of 1898. Alaska Section. H. L. Ball. <i>Extract from Monthly Weather Review.</i> |
| 133 | Instructions Governing the Corn, Wheat, Cotton, Sugar, and Rice Region Service. | 189 | Monthly Weather Review for December, 1898. |
| 134 | Instructions to Operators on the United States Seacoast Telegraph Lines. | 190 | Monthly Weather Review. Annual Summary for 1898. |
| 135 | Monthly Weather Review for September, 1897. | 191 | Bulletin No. 25. Weather Forecasting. Some Facts Historical, Practical, and Theoretical. Willis L. Moore. |
| 136 | Bulletin D. Rainfall of the United States, with Annual, Seasonal, and Other Charts. A. J. Henry. | 192 | Monthly Weather Review for January, 1899. |
| 137 | Monthly Report of the River and Flood Service for September, 1897. | 193 | Circular E, Instrument Division. Measurement of Precipitation. C. F. Marvin. |
| 138 | United States Daily Atmospheric Survey. Willis L. Moore. | 194 | Hydrology of the Lake Minnetonka Watershed. Geo. W. Cooley. <i>Extract from Monthly Weather Review.</i> |
| 139 | Report of the Chief of the Weather Bureau for 1897. 8vo edition. | 195 | Monthly Weather Review for February, 1899. |
| 140 | Forest and Rainfall. H. A. Hazen. | 196 | Monthly Weather Review for March, 1899. |
| 141 | Monthly Weather Review for October, 1897. | 197 | Bulletin No. 26. Lightning and the Electricity of the Air. A. G. McAdie and A. J. Henry. In two parts. |
| 142 | The Probable State of the Sky Along the Path of the Total Eclipse of the Sun, May 28, 1900. F. H. Bigelow. <i>Extract from Monthly Weather Review.</i> | 198 | Monthly Weather Review for April, 1899. |
| 143 | Bulletin E. Floods of the Mississippi River. Park Morrill. | 199 | Property Loss by Lightning in 1898. A. J. Henry and A. G. McAdie. |
| 144 | Monthly Report of the River and Flood Service for October, 1897. | 200 | Monthly Weather Review for May, 1899. |
| 145 | The Highest Kite Ascensions at Blue Hill. S. P. Ferguson. <i>Extract from Monthly Weather Review.</i> | 201 | Climatology of the Isthmus of Panama. H. L. Abbot. <i>Extract from the Monthly Weather Review.</i> |
| 146 | Monthly Weather Review for November, 1897. | 202 | An Advance in Measuring and Photographing Sounds. B. F. Sharp. <i>Extract from Monthly Weather Review.</i> |
| 147 | Monthly Report of the River and Flood Service for November, 1897. <i>Extract from Monthly Weather Review.</i> | 203 | Variations in Lake Levels and Atmospheric Pressure. <i>Extract from Monthly Weather Review.</i> |
| 148 | An Improved Sunshine Recorder. D. T. Maring. <i>Extract from Monthly Weather Review.</i> | 204 | Monthly Weather Review for June, 1899. |
| 149 | A Winter Barograph Curve from the South Pacific Ocean. <i>Extract from Monthly Weather Review.</i> | 205 | Monthly Weather Review for July, 1899. |
| 150 | Bulletin No. 21. Abstract of a Report on Solar and Terrestrial Magnetism in Their Relations to Meteorology. | 206 | Report of the Chief of the Weather Bureau for 1899. 8vo. |
| 151 | Monthly Report of the River and Flood Service for December, 1897. <i>Extract from Monthly Weather Review.</i> | 207 | Monthly Weather Review for August, 1899. |
| 152 | Monthly Weather Review for December, 1897. | 208 | Bulletin F. Vertical Gradients of Temperature, Humidity, and Wind Direction. (Kite Observations of 1898.) H. C. Frank- enfield. |
| 153 | Monthly Report of the River and Flood Service for January, 1898. <i>Extract from Monthly Weather Review.</i> | 209 | Bulletin No. 27. The Probable State of the Sky Along the Path of Total Eclipse of the Sun, May 28, 1900. Observations of 1899. F. H. Bigelow. |
| 154 | Monthly Weather Review. Annual Summary for 1897. | 210 | Monthly Weather Review for September, 1899. |
| 155 | Monthly Weather Review for January, 1898. | 211 | Bulletin No. 28. The Climate of San Francisco, Cal. A. G. McAdie and Geo. H. Willson. |
| 156 | Monthly Report of the River and Flood Service for February, 1898. <i>Extract from Monthly Weather Review.</i> | 212 | Monthly Weather Review for October, 1899. |
| 157 | Monthly Weather Review for February, 1898. | 213 | Meteorological Chart of the Great Lakes. Summary for the Season of 1899. |
| 158 | Monthly Bulletin of the River and Flood Service for March, 1898. <i>Extract from Monthly Weather Review.</i> | | |
| 159 | Wrecks and Casualties on the Great Lakes during 1895, 1896, and 1897. | | |
| 160 | Monthly Bulletin of the River and Flood Service, for April, 1898. <i>Extract from Monthly Weather Review.</i> | | |
| 161 | Monthly Weather Review for March, 1898. | | |
| 162 | Normal Annual Sunshine and Snowfall. <i>Extract from Monthly Weather Review.</i> | | |

W. B. No.	Title of publication.	W. B. No.	Title of publication.
214	Monthly Weather Review for November, 1899.	282	Monthly Weather Review for January, 1903.
215	Monthly Weather Review for December, 1899.	283	Monthly Weather Review for February, 1903.
216	Monthly Weather Review. Annual Summary for 1899.	284	Monthly Weather Review for March, 1903.
217	Monthly Weather Review for January, 1900.	285	Circular E, Instrument Division. Measurement of Precipitation. C. F. Marvin. Second edition.
218	Monthly Weather Review for February, 1900.	286	Meteorological Chart of the Great Lakes, 1903.
219	Bulletin No. 29. Frost Fighting. A. G. McAdie.	287	Monthly Weather Review for April, 1903.
220	Monthly Weather Review for March, 1900.	288	Bulletin K. Storms of the Great Lakes. E. B. Garriott.
221	Bulletin G. Atmospheric Radiation. F. W. Very.	289	Monthly Weather Review for May, 1903.
222	Monthly Weather Review for April, 1900.	290	Studies on the Meteorological Effects of the Solar and Terrestrial Physical Processes. The Semidiurnal Periods in the Earth's Atmosphere. F. H. Bigelow. <i>Extract from Monthly Weather Review.</i>
223	Anemometer Tests. C. F. Marvin. <i>Extract from Monthly Weather Review.</i>	291	Monthly Weather Review for June, 1903.
224	Monthly Weather Review for May, 1900.	292	Bulletin L. Climatology of California. Alexander G. McAdie.
225	Monthly Weather Review for June, 1900.	293	Monthly Weather Review for July, 1903.
226	Monthly Weather Review for July, 1900.	294	Bulletin No. 33. Weather Folk-Lore and Local Weather Signs. E. B. Garriott.
227	Daily River Stages. Part VI. For 1896, 1897, 1898, and 1899.	295	Monthly Weather Review for August, 1903.
228	Tables of Daily Precipitation. H. C. Frankenfield.	296	Monthly Weather Review for September, 1903.
229	Monthly Weather Review for August, 1900.	297	Monthly Weather Review for October, 1903.
230	Monthly Weather Review for September, 1900.	298	Meteorological Chart of the Great Lakes. Summary for 1903.
231	Report of the Chief of the Weather Bureau for 1900. Svo.	299	Monthly Weather Review for November, 1903.
232	Bulletin H. West India Hurricanes. E. B. Garriott.	300	Monthly Weather Review for December, 1903.
233	Circular D, Instrument Division. Anemometry. C. F. Marvin.	301	Climatic Charts of the United States.
234	Monthly Weather Review for October, 1900.	302	Monthly Weather Review. Annual Summary for 1903.
235	Psychrometric Tables. C. F. Marvin.	303	Bulletin M. The Floods of the Spring of 1903 in the Mississippi Watershed. H. C. Frankenfield.
236	Monthly Weather Review for November, 1900.	304	Instructions Governing the Corn, Wheat, Cotton, and Sugar and Rice Regions Service. Second edition.
237	Meteorological Chart of the Great Lakes. Summary for the Season of 1900.	305	Monthly Weather Review for January, 1904.
238	Monthly Weather Review for December, 1900.	306	Monthly Weather Review for February, 1904.
239	Monthly Weather Review. Annual Summary for 1900.	307	Monthly Weather Review for March, 1904.
240	Monthly Weather Review for January, 1901.	308	Monthly Weather Review for April, 1904.
241	Circular F, Instrument Division. Barometers and Measurement of Atmospheric Pressure. C. F. Marvin. Second edition.	309	Meteorological Chart of the Great Lakes, 1904.
242	Monthly Weather Review for February, 1901.	310	Monthly Weather Review for May, 1904.
243	Monthly Weather Review for March, 1901.	311	Bulletin No. 34. Climate: Its Physical Basis and Controlling Factors. Willis L. Moore.
244	Meteorological Chart of the Great Lakes. No. 1. 1901.	312	Invariability of our Winter Climate. William B. Stockman. <i>Reprint from Monthly Weather Review.</i>
245	Monthly Weather Review for April, 1901.	313	Monthly Weather Review for June, 1904.
246	Monthly Weather Review for May, 1901.	314	On the General Circulation of the Atmosphere in Middle and Higher Latitudes. W. N. Shaw. <i>Reprint from Monthly Weather Review.</i>
247	Monthly Weather Review for June, 1901.	315	Monthly Weather Review for July, 1904.
248	Weather Bureau Exhibit at the Pan-American Exposition. Buffalo, N. Y., 1901. <i>Reprint from Monthly Weather Review.</i>	316	Studies on the Circulation of the Atmosphere of the Sun and of the Earth. F. H. Bigelow. <i>Reprint from Monthly Weather Review.</i>
249	Monthly Weather Review for July, 1901.	317	Monthly Weather Review for August, 1904.
250	Instructions for Voluntary Observers. Second edition.	318	Monthly Weather Review for September, 1904.
251	Monthly Weather Review for August, 1901.	319	Monthly Weather Review for October, 1904.
252	Circular G, Instrument Division. Instructions for the Care and Management of Sunshine Recorders. C. F. Marvin. Second edition.	320	Sunshine Tables; three parts.
253	Monthly Weather Review for September, 1901.	321	Monthly Weather Review for November, 1904.
254	The Solar Constant. F. W. Very. <i>Reprint from Monthly Weather Review.</i>	322	Bulletin No. 35. Long-Range Weather Forecasts. E. B. Garriott.
255	Monthly Weather Review for October, 1901.	323	Monthly Weather Review for December, 1904.
256	Bulletin No. 30. Loss of Life in the United States by Lightning. A. J. Henry.	324	Meteorological Chart of the Great Lakes. No. 2. 1904.
257	Monthly Weather Review for November, 1901.	325	Monthly Weather Review. Annual Summary for 1904.
258	Meteorological Chart of the Great Lakes. No. 2. 1901.	326	Bulletin N. Periodic Variation of Rainfall in the Arid Region. William B. Stockman.
259	Monthly Weather Review for December, 1901.	327	Evaporation Observations in the United States. H. H. Kimball. <i>Reprint from Monthly Weather Review.</i>
260	Monthly Weather Review. Annual Summary for 1901.	328	Monthly Weather Review for January, 1905.
261	Monthly Weather Review for January, 1902.	329	Monthly Weather Review for February, 1905.
262	Bulletin J. Wind Velocity and Fluctuation of Water Level on Lake Erie. A. J. Henry.	330	Monthly Weather Review for March, 1905.
263	Monthly Weather Review for February, 1902.	331	Monthly Weather Review for April, 1905.
264	Meteorological Chart of the Great Lakes. No. 1. 1902.	332	Monthly Weather Review for May, 1905.
265	Bulletin No. 31. Proceedings of the Second Convention of Weather Bureau Officials, held at Milwaukee, August 27-29, 1901.	333	Meteorological Chart of the Great Lakes, 1905.
266	Monthly Weather Review for March, 1902.	334	Bulletin O. Temperature and Relative Humidity Data. William B. Stockman.
267	Bulletin I. Eclipse Meteorology and Allied Problems.	335	Monthly Weather Review for June, 1905.
268	Bulletin No. 32. Hurricanes: Especially Those of Porto Rico and St. Kitts. W. H. Alexander.	336	Improved Methods for Finding Altitude and Azimuth, Geographical Position, and the Variation of the Compass. G. W. Littlehale. <i>Reprint from Monthly Weather Review.</i>
269	Monthly Weather Review for April, 1902.	337	Monthly Weather Review for July, 1905.
270	Monthly Weather Review for May, 1902.	338	Report of the Chief of the Weather Bureau for 1905.
271	Monthly Weather Review for June, 1902.	339	Daily River Stages. Part VII. For the Years 1900, 1901, 1902, 1903, and 1904.
272	Monthly Weather Review for July, 1902.	340	Monthly Weather Review for August, 1905.
273	Studies on the Statics and Kinematics of the Atmosphere in the United States. F. H. Bigelow. <i>Reprint from Monthly Weather Review.</i>	341	Monthly Weather Review for September, 1905.
274	Monthly Weather Review for August, 1902.	342	Bulletin No. 36. Relations between Climates and Crops. Cleveland Abbe.
275	Monthly Weather Review for September, 1902.	343	Monthly Weather Review for October, 1905.
276	Monthly Weather Review for October, 1902.	344	Studies on the Diurnal Periods in the Lower Strata of the Atmosphere. F. H. Bigelow.
277	Circular A, Instrument Division. Instructions for Obtaining and Tabulating Records from Recording Instruments. C. F. Marvin. Second edition.	345	Monthly Weather Review for November, 1905.
278	Monthly Weather Review for November, 1902.		
279	Monthly Weather Review for December, 1902. Vol. XXX, No. 12.		
280	Meteorological Charts of the Great Lakes, 1902.		
281	Monthly Weather Review. Annual Summary for 1902.		

W. B. No.	Title of publication.	W. B. No.	Title of publication.
346	Monthly Weather Review for December, 1905.	423	Studies on the Vortices in the Atmosphere of the Earth. F. H. Bigelow. <i>Reprints from the Monthly Weather Review.</i>
347	Circulars B and C (combined), Instrument Division, Instructions for Cooperative Observers. C. F. Marvin. Third edition.	424	Monthly Weather Review for December, 1909.
348	Monthly Weather Review. Annual Summary for 1905.	425	Monthly Weather Review for January, 1910.
349	Bulletin No. 37. Recent Practice in the Erection of Lightning Conductors. Alfred J. Henry.	426	Monthly Weather Review for February, 1910.
350	Meteorological Chart of the Great Lakes, 1905. No. 2.	427	Bulletin of the Mount Weather Observatory. Vol. 2, Part 4.
351	Monthly Weather Review for January, 1906.	428	Bulletin of the Mount Weather Observatory. Vol. 2, Part 5.
352	Monthly Weather Review for February, 1906.	429	Monthly Weather Review for March, 1910.
353	Monthly Weather Review for March, 1906.	430	Bulletin of the Mount Weather Observatory. Vol. 2, Part 6.
354	Monthly Weather Review for April, 1906.	431	Monthly Weather Review for April, 1910.
355	Bulletin P. Cold Waves and Frost in the United States. E. B. Garriott.	432	Bulletin of the Mount Weather Observatory. Vol. 3, Part 1.
356	Meteorological Chart of the Great Lakes, 1906.	433	Monthly Weather Review for May, 1910.
357	Monthly Weather Review for May, 1906.	434	Monthly Weather Review for June, 1910.
358	Monthly Weather Review for June, 1906.	435	Bulletin No. 38. Mississippi River Levees and their Effect on River Stages during Flood Periods. S. C. Emery.
359	Monthly Weather Review for July, 1906.	436	Monthly Weather Review for July, 1910.
360	Monthly Weather Review for August, 1906.	437	Bulletin of the Mount Weather Observatory. Vol. 3, Part 2.
361	Bulletin Q. Climatology of the United States. Alfred J. Henry.	438	Monthly Weather Review for August, 1910.
362	Monthly Weather Review for September, 1906.	439	Bulletin of the Mount Weather Observatory. Vol. 3, Part 3.
363	Monthly Weather Review for October, 1906.	440	Monthly Weather Review for September, 1910.
364	Circular D, Instrument Division. Anemometry. C. F. Marvin. Third edition.	441	Bulletin of the Mount Weather Observatory. Vol. 3, Part 4.
365	Monthly Weather Review for November, 1906.	442	Monthly Weather Review for October, 1910.
366	Monthly Weather Review for December, 1906.	443	Bulletin T. Frost and Temperature Conditions in the Cranberry Marshes of Wisconsin. H. J. Cox.
367	Monthly Weather Review. Annual Summary for 1906.	444	Instructions to Marine Meteorological Observers of the Weather Bureau. Third edition.
368	Monthly Weather Review for January, 1907.	445	Circular E, Instrument Division. Measurement of Precipitation. C. F. Marvin. Third edition, and reprint of 1913.
369	Monthly Weather Review for February, 1907.	446	Monthly Weather Review for November, 1910.
370	Monthly Weather Review for March, 1907.	447	Bulletin U. Temperature Departures, Monthly and Annual, in the United States. 1873 to 1909.
371	Monthly Weather Review for April, 1907.	448	Monthly Weather Review for December, 1910.
372	Studies on the Thermodynamics of the Atmosphere. F. H. Bigelow. <i>Reprint from Monthly Weather Review.</i>	449	Bulletin V. Frost Data of the United States. P. C. Day.
373	Monthly Weather Review for May, 1907.	450	Instructions for Operating the Hygograph. Appendix to Circular A, Instrument Division. C. F. Marvin.
374	Monthly Weather Review for June, 1907.	451	Monthly Weather Review for January, 1911.
375	Meteorological Chart of the Great Lakes, 1906. No. 2.	452	Monthly Weather Review for February, 1911.
376	Meteorological Chart of the Great Lakes, 1907.	453	Daily River Stages. Part X. For the years 1909 and 1910. (The serial number was inadvertently omitted from Part IX, 1907 and 1908.)
377	Monthly Weather Review for July, 1907.	454	Bulletin of the Mount Weather Observatory. Vol. 3, Part 5.
378	Monthly Weather Review for August, 1907.	455	Monthly Weather Review for March, 1911.
379	Report of the Chief of the Weather Bureau, 1906-7.	456	Circular G, Instrument Division. Instructions for the Care and Management of Sunshine Recorders. C. F. Marvin. Third edition.
380	Monthly Weather Review for September, 1907.	457	Bulletin of the Mount Weather Observatory. Vol. 3, Title-page and Index.
381	Bulletin of the Mount Weather Observatory. Vol. 1, Part 1.	458	Monthly Weather Review for April, 1911.
382	Monthly Weather Review for October, 1907.	459	(Circulars B and C (combined). Instrument Division. Instructions for Cooperative Observers. C. F. Marvin. Fourth edition.
383	Monthly Weather Review for November, 1907.	459*	Bulletin of the Mount Weather Observatory. Vol. 4, Part 1.
384	Monthly Weather Review for December, 1907.	460	Monthly Weather Review for May, 1911.
385	Monthly Weather Review. Annual Summary for 1907.	461	Monthly Weather Review for June, 1911.
386	Monthly Weather Review for January, 1908.	462	Bulletin of the Mount Weather Observatory. Vol. 4, Part 2.
387	Monthly Weather Review for February, 1908.	463	Bulletin No. 39. A course in Meteorology and Physical Geography. W. N. Allen.
388	Bulletin of the Mount Weather Observatory. Vol. 1, Part 2.	464	Monthly Weather Review for July, 1911.
389	Monthly Weather Review for March, 1908.	465	Monthly Weather Review for August, 1911.
390	Monthly Weather Review for April, 1908.	466	Bulletin of the Mount Weather Observatory. Vol. 4, Part 3.
391	Bulletin of the Mount Weather Observatory. Vol. 1, Part 3.	467	Bulletin No. 42. Forecasting the Weather. G. S. Bliss.
392	Monthly Weather Review for May, 1908.	468	Monthly Weather Review for September, 1911.
393	Monthly Weather Review for June, 1908.	469	Instructions to Special River and Rainfall Observers. (Reprint.)
394	Monthly Weather Review for July, 1908.	470	Monthly Weather Review for October, 1911.
395	Bulletin R. The Daily Normal Temperature and Precipitation of the United States. F. H. Bigelow.	471	Bulletin No. 40. The Relation between the Precipitation over the Watershed of the Ohio River above and the Stream-flow below at Cincinnati. J. Warren Smith.
396	Monthly Weather Review for August, 1908.	472	Circular F, Instrument Division. Barometers and the Measurement of Atmospheric Pressure. C. F. Marvin. Fourth edition.
397	Instructions to the Marine Meteorological Observers of the United States Weather Bureau.	473	Bulletin No. 41. Forecasting Frost in the North Pacific States. E. A. Beals.
398	Monthly Weather Review for September, 1908.	474	Monthly Weather Review for November, 1911.
399	Monthly Weather Review for October, 1908.	475	Monthly Weather Review for December, 1911.
400	Bulletin of the Mount Weather Observatory. Vol. 1, Part 4.	476	Bulletin W. Summaries of Climatological Data by Sections. (Also issued in 104 separate parts without W. B. numbers.)
401	Circular F, Instrument Division. Barometers and the Measurement of Atmospheric Pressure. C. F. Marvin. Third edition.	477	Monthly Weather Review for January, 1912.
402	Monthly Weather Review for November, 1908.	478	Bulletin of the Mount Weather Observatory. Vol. 4, Part 4.
403	Daily River Stages. Part VIII. For the years 1905 and 1906.	479	Monthly Weather Review for February, 1912.
404	Monthly Weather Review for December, 1908.	480	Bulletin of the Mount Weather Observatory. Vol. 4, Part 5.
405	Monthly Weather Review. Annual Summary for 1908.	481	Monthly Weather Review for March, 1912.
406	Bulletin of the Mount Weather Observatory. Vol. 2, Part 1.	482	Bulletin of the Mount Weather Observatory. Vol. 4, Part 6.
407	Monthly Weather Review for January, 1909.	483	Bulletin of the Mount Weather Observatory. Vol. 4, Title page and Index.
408	Bulletin S. Report on the Temperatures and Vapor Tensions of the United States. F. H. Bigelow.		
409	A Manual for Observers in Climatology and Evaporation.		
410	Monthly Weather Review for February, 1909.		
411	Monthly Weather Review for March, 1909.		
412	Bulletin of the Mount Weather Observatory. Vol. 2, Part 2.		
413	Monthly Weather Review for April, 1909.		
414	Monthly Weather Review for May, 1909.		
415	Instructions to Special River and Rainfall Observers.		
416	Monthly Weather Review for June, 1909.		
417	Monthly Weather Review for July, 1909.		
418	Bulletin of the Mount Weather Observatory. Vol. 2, Part 3.		
419	Monthly Weather Review for August, 1909.		
420	Monthly Weather Review for September, 1909.		
421	Monthly Weather Review for October, 1909.		
422	Monthly Weather Review for November, 1909.		

W. B. No.	Title of publication.
484	Monthly Weather Review for April, 1912.
485	Monthly Weather Review for May, 1912.
486	Monthly Weather Review for June, 1912.
487	Bulletin X. Hurricanes of the West Indies. O. L. Fassig.
488	Monthly Weather Review for July, 1912.
489	Bulletin of the Mount Weather Observatory. Vol. 5, Part 1.
490	Monthly Weather Review for August, 1912.
491	Monthly Weather Review for September, 1912.
492	Bulletin of the Mount Weather Observatory. Vol. 5, Part 2.
493	Instructions governing the Corn, Wheat, Cotton, and Sugar and Rice Region Service. Third edition.
494	Bulletin of the Mount Weather Observatory. Vol. 5, Part 3.
495	Monthly Weather Review for October, 1912.
496	Monthly Weather Review for November, 1912.
497	Monthly Weather Review for December, 1912.
498	Bulletin No. 43. The Rivers and Floods of the Sacramento and San Joaquin Watersheds. N. R. Taylor.
499	Bulletin No. 44. The Climate of San Francisco. A. G. McAdie.
500	Monthly Weather Review for January, 1913.
501	Bulletin of the Mount Weather Observatory. Vol. 5, Part 4.
502	Monthly Weather Review for February, 1913.
503	Bulletin of the Mount Weather Observatory. Vol. 5, Part 5.
504	Monthly Weather Review for March, 1913.
505	Bulletin of the Mount Weather Observatory. Vol. 5, Part 6.
506	Monthly Weather Review for April, 1913.
507	Daily River Stages. Part XI. For the years 1911 and 1912.
508	Monthly Weather Review for May, 1913.
509	Circular A, Instrument Division. Instructions for Obtaining and Tabulating Records from Recording Instruments. C. F. Marvin. Third edition.
510	Monthly Weather Review for June, 1913.
511	Bulletin of the Mount Weather Observatory. Vol. 6, Part 1.
512	Brief List of Meteorological Text Books. C. F. Talman. (First edition, 1909; second edition, 1910; third edition, 1913.)
513	Monthly Weather Review for July, 1913.
514	Bulletin of the Mount Weather Observatory. Vol. 5, Title-page and Index.
515	Monthly Weather Review for August, 1913.
516	Monthly Weather Review for September, 1913.
517	Bulletin of the Mount Weather Observatory. Vol. 6, Part 2.
518	Circular G, Instrument Division. Instructions for the Care and Management of Electrical Sunshine Recorders. Fourth edition.
519	Bulletin Y. The Ohio and Mississippi Floods of 1912. H. C. Frankenfield.
520	Bulletin Z. The Floods of 1913 in the Rivers of the Ohio and Lower Mississippi Valleys. A. J. Henry.
521	Monthly Weather Review for October, 1913.
522	The Weather Bureau Kiosk. C. F. Marvin.
523	Monthly Weather Review for November, 1913.
524	Bulletin of the Mount Weather Observatory. Vol. 6, Part 3.
525	Monthly Weather Review for December, 1913.
526	Bulletin of the Mount Weather Observatory. Vol. 6, Part 4.
527	Monthly Weather Review for January, 1914.
528	Monthly Weather Review for February, 1914.
529	Monthly Weather Review for March, 1914.
530	Circular D, Instrument Division. Instructions for the Installation and Maintenance of Wind Measuring and Recording Apparatus. Fourth revision.
531	Monthly Weather Review for April, 1914.
532	Bulletin of the Mount Weather Observatory. Vol. 6, Part 5.
533	Monthly Weather Review for May, 1914.
534	Monthly Weather Review for June, 1914.
535	Monthly Weather Review for July, 1914.
536	Monthly Weather Review for August, 1914.
537	Monthly Weather Review for September, 1914.
538	Monthly Weather Review. Supplement No. 1. Types of Storms of the United States and their Average Movements. E. H. Bowie and R. H. Weightman.
539	Circulars B and C (combined), Instrument Division. Instructions for Cooperative Observers. Fifth edition.
540	Monthly Weather Review for October, 1914.
541	Monthly Weather Review for November, 1914.
542	Papers on Frosts and Frost Protection in the United States. Reprinted from Monthly Weather Review, October, 1914.
543	Monthly Weather Review for December, 1914.
544	Climatological Data for the United States by Sections. January, 1915. [See 551.]
545	Monthly Weather Review for January, 1915.
546	Climatological Data for the United States by Sections. February, 1915.
547	Monthly Weather Review for February, 1915.
548	Climatological Data for the United States by Sections. March, 1915.
549	Daily River Stages. Part XII. For the years 1913 and 1914.
550	Monthly Weather Review for March, 1915.
551	Climatological Data for the United States by Sections. For the Year 1914. [See also unnumbered list below.]
552	Climatological Data for the United States by Sections. April, 1915.

W. B. No.	Title of publication.
553	Monthly Weather Review for April, 1915.
554	Monthly Weather Review for May, 1915.
555	Climatological Data for the United States by Sections. May, 1915.
556	Climatological Data for the United States by Sections. June, 1915.
557	Monthly Weather Review for June, 1915.
558	Monthly Weather Review. Supplement No. 2. Calendar of the common trees of the eastern United States, by G. N. Lamb; Phenological data by T. Mikesell at Wauseon, Ohio.
559	Circular L, Instrument Division. Instructions for the Installation and Operation of Class "A" Evaporation Stations. B. C. Kadel.
560	Monthly Weather Review for July, 1915.

TABLE 1.—Monthly Weather Review, by years and volumes.

[Each volume usually consists of 12 monthly numbers. Annual Summaries, when included in a volume, were issued as No. 13 of that volume.]

Year.	Volume.	Year.	Volume.
1873.....	1 [1]	1894.....	23
1874.....	2	1895.....	23
1875.....	3	1896.....	24
1876.....	4	1897.....	25
1877.....	5	1898.....	26
1878.....	6	1899.....	27
1879.....	7	1900.....	28
1880.....	8	1901.....	29
1881.....	9	1902.....	30
1882.....	10	1903.....	31
1883.....	11	1904.....	32
1884.....	12	1905.....	33
1885.....	13	1906.....	34
1886.....	14	1907.....	35
1887.....	15	1908.....	36
1888.....	16	1909.....	37
1889.....	17	1910.....	38
1890.....	18	1911.....	39
1891.....	19	1912.....	40
1892.....	20	1913.....	41
1893.....	21	1914.....	42
		1915.....	43

1 Volume numbers first appeared in the issue for February, 1883.

2 The first title-page was for v. 14, 1886.

3 An annual summary and annual index first given for 1889, v. 17.

4 Annual summary advanced (1893, v. 21) to a separate, thirteenth part of v. which appeared annually thereafter until 1909.

5 These years have a title-page and annual index, but no annual summary.

While the above list embraces the vast majority of Weather Bureau publications, there are a few of general interest that have not received these numbers, such as—

Proceedings of the Third Convention of Weather Bureau Officials held at Peoria, Ill., September 20–22, 1904. Washington, 1904. 267 p. 8°.

Climatological data, for each of 46 sections, monthly. 8 p. 4°. [Chiefly published at Section Centers. A separate issue of text and tables appears since January, 1914, in corresponding sections of "Climatological Data for the United States by Sections" as listed under W. B. No. 544 and elsewhere.]

National Weather and Crop Bulletin, monthly or weekly. 8 p. 4°.

Snow and ice bulletin with chart, weekly during the winter. f°.

The Weather Bureau. Washington, 1915. 58 p. 12°.

Explanation of the Weather Map. n. d. 4 p. 8°. Various climatological charts.

NOTES.

It is reported that Dr. Wilhelm Trabert has retired from the chair of Geophysics in the University of Vienna, and also from the directorship of the K. k. Zentralanstalt für Meteorologie und Geodynamik. The cause is reported to be ill health.

Dr. A. de Quervain has been appointed honorary professor of meteorology in the University of Zurich.

Dr. A. J. Herbertson, professor of geography in the University of Oxford, and well known for his contributions to geography and climatology, died July 31, 1915, at the age of 50 years.